

Status of claims as of April 13, 2006

1. (currently amended) In the method of manually installing arch shape cross section thermoplastic leaching chambers having sidewalls with a multiplicity of small perforations for passage of water and having widths of about 3 feet, for forming an interconnected string of chambers within a trench in soil, wherein each chamber has a first end and an opposing second end, wherein the first and second ends of adjacent chambers are configured to mate with a load transferring joints, the improvement which comprises: making the length of each chamber in the range of about 4 to 5 feet, to thereby facilitate joining chambers together within trenches, and to thereby increase the curve factor of a chamber string, compared to a string of about 6 foot long chambers.

2. (original) The method of claim 1, wherein the length of said chamber is about 4 feet

3. (original) The method of claim 1 wherein the joint between two mating chambers provides an essentially linear connection.

4. (original) The method of claim 3 wherein said string of chambers has a horizontal plane curve factor of greater than 0.57 degrees per foot of length.

5-6 cancelled

7. (currently amended) In the method of manually installing arch shape cross section leaching chambers having sidewalls with a multiplicity of perforations for passage of water, for forming an interconnected string of chambers within a trench in soil, wherein each chamber has a first end and an opposing second end, wherein the first and second ends of adjacent chambers are configured to mate with a load transferring joint; the improvement which comprises: increasing the number of joints for a given length of chamber string, ~~so that to make the string of~~ interconnected chambers adaptable to angular variations in the horizontal and vertical planes

8. The method of claim 7, wherein the nominal length of said chamber is about 4 feet.

9. The method of claim 7 wherein the joint between two mating chambers provides an essentially linear connection.

10. The method of claim 7 wherein said string has a horizontal plane curve factor of at least than 0.57 degrees per foot of length.

11. cancelled

12. (currently amended) In the method of manually installing arch shape cross section leaching chambers having sidewalls with a multiplicity of perforations for passage of water, for forming an interconnected string of chambers within a trench in soil, wherein each chamber has a first end and an opposing second end, wherein the first and second ends of adjacent chambers are configured to mate ~~with at~~ a load transferring joint; wherein the process of installation includes removing a chamber from a stack of nested chambers; engaging the first end of the chamber with the second end of a chamber previously installed in the trench while standing in the trench, and lowering the second end of the chamber into the the trench, the improvement which comprises: making the length of each chamber less than about 5.7 feet ~~100% of the mean height of a U.S. male, to thereby facilitate handling and installation.~~

13. (currently amended) The method of claim 12 wherein the chamber length is between about 4 and 5 feet.

14 cancelled

15. (currently amended) An arch shape cross section molded thermoplastic leaching chamber having having sidewalls with a multiplicity of perforations for passage of water and a length in the range of about 4 to about 5 feet, a length to width aspect ratio between 1.2 and 1.62, a weight per foot of about 2.7 to 3 pounds, and a flexibility factor of greater than about 10.2 inch.

16. The chamber of claim ~~17~~ 15 having a width of about 3 feet.

17. (currently amended) A continuous curve arch shape cross section molded thermoplastic corrugated leaching chamber which comprises: ~~corrugated~~ interior and exterior surfaces which are substantially free of ribs;

opposing sidewalls having a multiplicity of horizontal slot perforations; and,
opposing first and second ends shaped for interconnecting with like chambers;
wherein the chamber has a length in the range 4 to 5 feet; and a flexibility factor of at least 0.2 inch.

18. cancelled

19. (new) The method of claim 12 wherein each chamber has a flexibility factor of greater than about 0.2 inch.

20. (new) The method of claim 19 wherein each chamber has a flexibility factor of greater than about 1 inch.

21. (new) The method of claim 12 wherein each chamber has a length to width aspect ratio between 1.2 and 2.0, a weight per foot of about 2.7 to 3 pounds, and a flexibility factor of greater than about 0.2 inch.

22. (new) The method of claim 12 wherein each chamber comprises a continuous curve arch shape cross section corrugated interior and exterior surfaces which are substantially free of ribs.

23. (new) The method of claim 22 wherein each chamber has a length to width aspect ratio between 1.2 and 2.0, a weight per foot of about 2.7 to 3 pounds.

24. (new) The method of claim 22 wherein each chamber has a flexibility factor of greater than about 1 inch.

25. (new) The chamber of claim 15 wherein the flexibility factor is greater than about 1 inch.